

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (cancelled):

2. (currently amended): An image reading device comprising:

a photo film passageway for guiding and passing developed photo film;

a light source for illuminating an image in said photo film positioned in said photo film passageway;

an a line image sensor for reading said image being illuminated when said photo film is being fed;

B, a mask member, secured to said photo film passageway, and on which said photo film is passed; and

a mask opening, formed in said mask member, for directing light from said light source toward said photo film;

wherein said mask opening is a mask slit extending in a width direction of said photo film, so that said mask slit is longer in said width direction of said photo film than a passing direction of said photo film.

3. (original): An image reading device as defined in claim 2, wherein said mask member is removably secured to said photo film passageway.

4. (original): An image reading device as defined in claim 3, further comprising a photo film carrier having said photo film passageway;

wherein said photo film carrier includes a feed roller for conveying said photo film in a longitudinal direction thereof, said image being read by said image sensor line by line while said feed roller conveys said photo film.

5. (original): An image reading device as defined in claim 4, further comprising a protrusion portion disposed on said mask member to extend in said width direction of said photo film, provided with said mask slit formed in a middle thereof, for flexing said photo film in said longitudinal direction to remove flexing in said width direction.

6. (original): An image reading device as defined in claim 4, wherein said photo film carrier includes:

B₁ a carrier base member, disposed nearer to said light source, provided with said mask member secured thereto, and having a carrier opening for introducing said light from said light source; and

a carrier cover member for covering said carrier base member at least partially, said photo film passageway being defined between said carrier cover member and said carrier base member;

further comprising a diffuser plate, secured to said carrier base member, for diffusing said light directed from said light source toward said mask member.

7. (original): An image reading device as defined in claim 6, further comprising a passage recess, formed in said mask member, extended to said photo film passageway, for guiding said photo film.

8. (original): An image reading device as defined in claim 5, wherein said protrusion portion comprises a cylindrical ridge.

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9. (original): An image reading device as defined in claim 6, further comprising a retainer member for removably said mask member to said carrier base member.

10. (original): An image reading device as defined in claim 9, wherein said retainer member is secured to one of said diffuser plate or said carrier base member and said mask member, for retention by magnetic attraction of one portion of a remaining one of said diffuser plate or said carrier base member and said mask member.

11. (original): An image reading device as defined in claim 9, wherein said retainer member comprises a portion for effecting retention with a click.

12. (original): An image reading device as defined in claim 10, further comprising:
at least one positioning hole formed in one of said carrier base member or said diffuser plate and said mask member; and

at least one positioning pin, disposed to protrude from a remaining one of said carrier base member or said diffuser plate and said mask member, fitted in said positioning hole, for positioning said mask member on said carrier base member or said diffuser plate.

13. (original): An image reading device as defined in claim 6, further comprising a retainer member for retaining said diffuser plate removably to said carrier base member.

14. (original): An image reading device as defined in claim 6, further comprising a fastening member for immovably fastening said diffuser plate to said carrier base member, said fastening member being separable by external operation, and allowing removal of said diffuser plate.

15. (original): An image reading device as defined in claim 6, wherein said light source is disposed under said photo film passageway, said diffuser plate and said mask member are

disposed to define a predetermined space therebetween, and dust on said photo film is dropped into said space.

16. (original): An image reading device as defined in claim 6, wherein said photo film is a selected one of at least first and second types;

said mask member is a selected one of at least first and second mask members associated with respectively said first and second types, and secured to said photo film passageway selectively.

31 17. (original): An image reading device as defined in claim 16, wherein said first and second types have widths different from one another, and said first and second types have said mask slit with a length different therebetween.

18. (original): An image reading device as defined in claim 6, further comprising:
first and second auto focus charts, disposed at respectively first and second ends of said mask slit as viewed in said width direction of said photo film, having an auto focus pattern common therebetween and adapted to focusing of a pick-up lens;

said image sensor picking up said first and second auto focus charts, for obtaining first and second pick-up information;

a control unit for obtaining contrasts of said first and second auto focus charts according to said first and second pick-up information, for detecting abnormality in an orientation of said mask member on said carrier base member if said contrasts have a difference beyond a tolerable range with said pick-up lens set in-focus, and for generating an alarm signal.

19. (previously presented): An image reading device comprising:
a photo film passageway for guiding and passing developed photo film;

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a light source for illuminating an image in said photo film positioned in said photo film passageway;

an image sensor for reading said image being illuminated;

a mask member, secured to said photo film passageway, and on which said photo film is passed;

a mask slit extending in a width direction of said photo film, formed in said mask member, for directing light from said light source toward said photo film;

β. a photo film carrier having said photo film passageway;

a carrier base member, disposed nearer to said light source, provided with said mask member secured thereto, and having a carrier opening for introducing said light from said light source;

a carrier cover member for covering said carrier base member at least partially, said photo film passageway being defined between said carrier cover member and said carrier base member;

first and second auto focus charts, disposed at respectively first and second ends of said mask slit as viewed in said width direction of said photo film, having an auto focus pattern common therebetween and adapted to focusing of a pick-up lens;

said image sensor picking up said first and second auto focus charts, for obtaining first and second pick-up information; and

a control unit for obtaining contrasts of said first and second auto focus charts according to said first and second pick-up information, for detecting abnormality in an orientation of said

mask member on said carrier base member if said contrasts have a difference beyond a tolerable range with said pick-up lens set in-focus, and for generating an alarm signal.

20. (currently amended): An image reading device comprising:

a photo film passageway for guiding and passing developed photo film;

a light source for illuminating an image in said photo film positioned in said photo film passageway;

B1. ~~an~~ a line image sensor for reading said image being illuminated when said photo film is being fed;

a mask member, secured to said photo film passageway, and on which said photo film is passed;

a mask slit extending in a width direction of said photo film, so that said mask slit is longer in said width direction of said photo film than a passing direction of said photo film, formed in said mask member, for directing light from said light source toward said photo film; and

a protrusion portion disposed on said mask member to extend in said width direction of said photo film, provided with said mask slit formed in a middle thereof, for flexing said photo film in said longitudinal direction to remove flexing in said width direction.

21. (previously presented): An image reading device comprising:

a photo film passageway for guiding and passing developed photo film;

a light source for illuminating an image in said photo film positioned in said photo film passageway;

an image sensor for reading said image being illuminated;

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a mask member, secured to said photo film passageway, and on which said photo film is passed;

a mask slit extending in a width direction of said photo film, formed in said mask member, for directing light from said light source toward said photo film;

first and second auto focus charts, disposed at respectively first and second ends of said mask slit as viewed in said width direction of said photo film, having an auto focus pattern common therebetween and adapted to focusing of a pick-up lens;

said image sensor picking up said first and second auto focus charts, for obtaining first and second pick-up information; and

a control unit for obtaining contrasts of said first and second auto focus charts according to said first and second pick-up information, for detecting abnormality in an orientation of said mask member if said contrasts have a difference beyond a tolerable range with said pick-up lens set in-focus.

22. (previously presented): The image reading device of claim 2, wherein the mask member transmits light to less than 50% of a frame of the photo film at a time.